

REMARKS

The Office Action of August 9, 2005 has been received and its contents carefully considered. In response, the present Amendment corrects an informality in claim 8 and revises independent claim 34, as will be discussed in more detail below.

Section 2 of the Office Action rejects independent claims 1, 4, and 25 (along with various dependent claims) for anticipation by Gibbons et al (which will be called simply "Gibbons" hereafter). Section 8 of the Office Action provides further comments about the rejection. For the reasons discussed below, however, it is respectfully submitted that claims 1, 4, and 25 are patentable over the reference.

Claim 1 includes a step (b) that recites "steadily exposing the spatial light modulator to light of the first color component during substantially the entire time that step (a) is conducted, the light being generated by a light source." Claims 4 and 25 have similar limitations regarding steady exposure. In contrast, Gibbons' Figure 2 shows four discrete flashes of light during the "Green Image" period (for example), not steady exposure or substantially steady exposure. Section 8 of the Office Action disputes this assertion. Section 8 appears to take the position that the four pulses of green light shown in Gibbons' Figure 2 represent what a viewer would see from the front side of Gibbons' spatial light modulator, but the back side is steadily exposed to green light.

Applicant respectfully disagrees with this conclusion. For one thing, Gibbons' Figure 2 refers to "Backlighting Pulses," suggesting that the pulses are generated by Gibbons' backlighting arrangement itself. Furthermore, the reference expressly states that the backlighting is turned on and off in the paragraph at column 4, lines 10-33. This paragraph says (with emphasis added):

More specifically, in order to display the green light information in one frame, there is a sequence of **four consecutive writing operations each separated by a green backlighting pulse** of predetermined duration and amplitude. The writing of a stable bi-level pattern is achieved, while all the lights are off, by addressing the matrix via lines 4 and 5 according to the

significance of the respective bit in the input video signal. For example, a bi-level pattern corresponding to the most-significant-bit is written over the entire matrix and, once completed, tube set 6 is **turned on** with an intensity $8I_g$ for a time period $T/16$, where I_g is a reference light intensity for the green image. Tube set 6 is then **turned off** for $T/16$, during which the matrix is overwritten to form a pattern appropriate to the next most-significant-bit, this taking $T/16$: once completed, tube set 6 is **turned on** at an intensity $4I_g$ for $T/16$. Then the light is **pulsed off** again for $T/16$, and the matrix is overwritten to produce a pattern corresponding to the next most-significant-bits for the green image, after which tube set 6 is **turned on** for $T/16$ at intensity $2I_g$. The overwriting and exposure sequence is repeated again, for a lighting intensity of I_g , whereupon display of the green image is completed.

Accordingly, it is respectfully submitted that Gibbons does **not** always expose his spatial light modulator to light generated by a light source located behind the spatial light modulator. That is, Gibbons teaches exposing a spatial light modulator to pulses of light, instead of steadily exposing it or substantially steadily exposing it.

Section 3 of the Office Action rejects independent claim 34 (along with dependent claim 35) for anticipation by Baldwin et al (which will hereafter be called simply “Baldwin”), and Section 8 provides additional comments. Claim 34 includes a step (b) which provides that bit ranks of the video words describing a given frame are displayed in a given order, and step (c) provides that the bit ranks of the video words describing the next frame are displayed in a different order.

Section 8 of the Office Action takes the position that the bit ranks are 10000 in the first frame in Baldwin’s Figure 4d, and 01110 in the next frame. But the ones and zeros in 10000 and 01110 represent the **values** of the bits, **not** the bit ranks (the number for Baldwin’s second frame is believed to be 01111 rather than 01110, but this is unimportant). An ordinarily skilled person who had read the present application would realize that “bit rank” refers to the most significant bit of the video words, the next-most significant bit, and so on down to the least significant bit. That is, if Baldwin’s five-bit video words are expressed as $a_42^4 + a_32^3 + a_22^2 + a_12^1 + a_02^0$, the a ’s represent the values of the bits (either 1 or 0) but the five bit ranks determine the numerical significance of the values.

In Baldwin’s Figure 4d, the bit ranks are clearly displayed in the same order in the first frame and in the second frame.

It is respectfully submitted that what is intended by "bit rank" is clear from the disclosure of the present application. Nevertheless, the present Amendment revises claim 34 by adding, "the bit ranks corresponding to the positions of the bits in the video words." Baldwin clearly bits having the same positions in his video words in the same order in his first and second frames.

Since the remaining claims that have been rejected depend from the independent claims discussed above and add additional limitations to further define the invention, they are patentable along with their independent claims and need not be further discussed.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,



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